

R E M A R K S

Claims 3 and 26 to 38 as set forth in Appendix I of this paper are currently pending in this case. Claims 3 and 28 to 33 have been amended as indicated.

Accordingly, applicants have revised the definition of Y in Claim 3 based on the disclosure on page 6, indicated lines 12 to 16, of the application to further bring out the nature of radicals which are readily exchangeable for hydrogen. Additionally, applicants have made a number of editorial changes in the wording of Claims 28 to 32, and have revised Claim 33 to further emphasize that the requirements of Claim 3 are fully incorporated into Claim 33 by the claim's preamble. No new matter has been added.

In light of the foregoing and the attached it is respectfully requested that the rejection

- a) of Claims 3 and 26 to 38 under Section 112, ¶1, as failing to comply with the written description requirement with regard to the expression "a radical which is readily exchangeable for H", and
- b) of Claim 28 under Section 112, ¶2, as being indefinite for referring to a "step (a)",

be withdrawn.

The Examiner further rejected Claims 33 to 38 under 35 U.S.C. §102(b) and §103(a) as being anticipated by, or as being unpatentable in light of, the teaching of *Dever et al.* (US 3,459,837). In this context, the Examiner interprets Claim 33 as being drawn to a process of making triacyl compounds (III) by reacting a carboxylic acid and a phosphorus trihalide.

It is respectfully submitted that Claim 33 depends upon Claim 3 and, accordingly, includes all limitations of Claim 3. In contrast to the Examiner's interpretation, Claim 33 relates to a process for the preparation of a phosphono compound (I) which comprises the preparation of the triacyl compound (III) and the subsequent reaction of the compound (III) with the hexahydrotriazine (II) to obtain the phosphono compound (I). It is well settled that if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious<sup>1</sup>). Also, anticipation is the ultimate or epitome of

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1) In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (CAFC 1988).

obviousness<sup>2</sup>). Hence, if an independent claim is novel under 35 U.S.C. §102, then any claim depending therefrom is novel. Applicants' Claims 33 to 38 depend either directly or indirectly upon Claim 3 and the subject matter of Claim 3 is neither anticipated by, nor rendered obvious by, the disclosure of *Dever et al.* The subject matter defined in applicants' Claims 33 to 38 can, therefore, also not be deemed to be anticipated by, or rendered obvious by, the disclosure of *Dever et al.* It is therefore respectfully requested that the rejections of Claims 33 to 38 based on the teaching of *Dever et al.* be withdrawn. Favorable action is solicited.

In light of the foregoing and the attached, all of applicants' claims are deemed to comply with the statutory requirements, and the application should be in condition for allowance. Early action by the Examiner would be greatly appreciated.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 11.0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



Herbert B. Keil

Reg. No. 18,967

1350 Connecticut Ave, N.W.  
Washington, D.C. 20036  
(202) 659-0100

Encl.: THE LISTING OF CLAIMS (Appendix I)

HBK/BAS

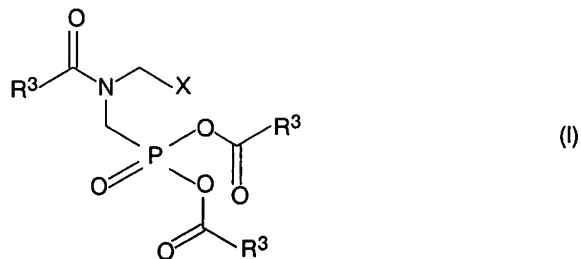
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2) In re Grose, 592 F.2d 1161, 201 USPQ 57 (CCPA 1979).

## A P P E N D I X I:

THE LISTING OF CLAIMS:

1. (canceled)
2. (canceled)
3. (currently amended) A process for the preparation of a phosphono compound of the formula I



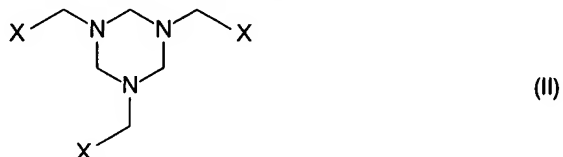
in which the radicals  $R^3$ , which can be identical or different, are  $C_1$ - $C_{18}$ -alkyl or aryl which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl,  $NO_2$  or  $OC_1$ - $C_4$ -alkyl, and

X is CN, COOZ,  $CONR^1R^2$  or  $CH_2OY$ ,

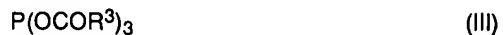
Y is H or is a radical which is readily exchangeable for H selected from the group consisting of  $C_1$ - $C_6$ -alkyl, aliphatic acyl having a  $C_1$ - $C_6$  aliphatic group, and benzoyl;

Z is H, an alkali metal, alkaline earth metal,  $C_1$ - $C_{18}$ -alkyl or aryl, which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl,  $NO_2$  or  $OC_1$ - $C_4$ -alkyl;

$R^1$  and  $R^2$ , which can be identical or different, are H or  $C_1$ - $C_4$ -alkyl, in which a hexahydrotriazine derivative of the formula II



is reacted with a triacyl phosphite of the formula III



in which  $R^3$  and X are as defined above.

4. (canceled)
5. (canceled)
6. (canceled)

7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)
17. (canceled)
18. (canceled)
19. (canceled)
20. (canceled)
21. (canceled)
22. (canceled)
23. (canceled)
24. (canceled)
25. (canceled)
26. (previously presented) A process as claimed in claim 3, wherein X is CN or COOZ.
27. (previously presented) A process as claimed in claim 3, wherein R<sup>3</sup> is phenyl which is unsubstituted or substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, NO<sub>2</sub> or OC<sub>1</sub>-C<sub>4</sub>-alkyl, or is CH<sub>3</sub>.
28. (currently amended) A process as claimed in claim 3, ~~wherein step (a)~~ which is carried out in an organic solvent.
29. (currently amended) A process as claimed in claim ~~26~~ 28, wherein the solvent ~~used~~ is dioxane or tetrahydrofuran.

30. (currently amended) A process as claimed in claim ~~26~~ 28, wherein a chlorinated organic solvent is used.
31. (currently amended) A process as claimed in claim ~~28~~ 30, wherein 1,2-dichloroethane is used as solvent.
32. (currently amended) A process as claimed in claim 3, wherein the compounds of the formulae II and III ~~is~~ are employed in essentially equivalent amounts.
33. (currently amended) A process as claimed in claim 3, ~~wherein~~ which further comprises preparing the compound of the formula III ~~is prepared~~ by reacting a carboxylic acid of the formula IV
- $$\text{R}^3\text{COOH} \qquad \qquad \qquad \text{(IV),}$$
- in which  $\text{R}^3$  has the meanings stated in claim 3 or a salt thereof with a phosphorus trihalide.
34. (previously presented) A process as claimed in claim 33, wherein an alkali metal salt or the ammonium salt of the carboxylic acid of the formula IV is reacted with the phosphorus halide.
35. (previously presented) A process as claimed in claim 33, wherein the carboxylic acid of the formula IV is reacted with the phosphorus halide in the presence of an amine.
36. (previously presented) A process as claimed in claim 33, wherein the carboxylic acid of the formula IV is reacted with the phosphorus halide in the absence of a base.
37. (previously presented) A process as claimed in claim 33, wherein the reaction is carried out in an inert organic solvent which is selected from among the aromatic or aliphatic hydrocarbons and chlorinated hydrocarbons.
38. (previously presented) A process as claimed in claim 37, wherein the solvent is recovered after the reaction and recycled.